

REMARKS

Claims 1-3, 5, 12-19, 21-23, 25-26, and 29-30 remain in the present application. Claims 4, 6-11, 20, 24 and 27-28 have been cancelled. Claims 1-3, 5, 12-19, 21-23, 25-26 and 29-30 have been amended.

Drawings

Drawing Figs. 1, 2 and 3 have been corrected to identify each figure with the legend -- Prior Art--. Replacement sheets are being submitted herewith containing corrected drawing Figs. 1, 2 and 3.

Allowable Subject Matter

Applicants acknowledge the Examiner's indication that claim 17 has been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objections

Claims 4, 10, 13, 26 and 27 have been objection to because of various informalities. Claims 4, 10 and 27 have been cancelled and claims 13 and 26 have been amended herewith thus rendering the objections moot.

Claim Rejections – 35 U.S.C. §112

Claim 4 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claim 4 has been cancelled herewith thus rendering the rejection moot.

Claim Rejections – 35 U.S.C. §102

Claims 1, 2, 8, 11 and 12 are rejected under 35 U.S.C. §102(e) as being anticipated by Lee et al. (U.S. Patent Publication No. US 2004/0120247 A1). Claims 8 and 11 have been cancelled herewith. Reconsideration of these rejections as they may apply to the now amended claims is thus respectfully requested for the following reasons.

Claim 1 (directed to a recording medium) and claim 12 (directed to a method of reproducing data from a recording medium) have been similarly amended to require that the second region for storing copy protection information has a unique arrangement of straight and wobbled pits that are not shown and described in the primary reference to Lee. In particular, the portion of the medium using for storing copy protection information has a first data unit with data encoded in straight type and subsequent data units with data encoded in straight type and data encoded in wobbled type, respectively. The claims have been specifically amended to require that the first data unit includes a sync data portion and a frame data portion encoded in straight type, respectively, and **each subsequent data unit** includes a sync data portion encoded in straight type and frame data portion encoded in straight type and wobbled type. The use of straight type and wobbled type pits in subsequent data units containing the copy protection information is not disclosed nor described in Lee.

It is the Examiner's position that Lee discloses a recording medium where information is recorded using a combination of general pits (straight type) and wobbled pits. First, Lee is not specifically concerned with the recording of copy protection information in a recording medium. Further, Lee is not concerned with the intermixing of straight and wobbled pits in subsequent data portions similar to that now recited in amended claims 1 and 12. Even assuming that the Examiner's interpretation of Lee is correct, which the Applicants do not concede, the use of

intermixed straight and wobbled pit portions in the areas other than the first data portion is not suggested or taught by the reference to support the current rejection under 35 U.S.C. §102(e). Thus, reconsideration of this rejection as it may apply to claims 1, 2, 11 and 12 is respectfully requested.

Claim Rejections – 35 U.S.C. §103

Claims 3, 4 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent Publication No. US 2004/0120247 A1) and in further view of Ozaki et al. (European Patent Publication No. 0703576 A1) and Murakami et al. (European Patent Publication No. 0997899 A2). Claim 4 has been cancelled herewith thus rendering the rejection moot with respect to claim 4.

First, claims 3 and 5 are each dependent, either directly or indirectly, on claim 1. The rejections of these claims based on Lee as the primary reference is equally unsupported in view of the amendments to claim 1.

In addition to the aforementioned deficiencies of Lee, claim 5 has been specifically amended to recite that the predetermined period in which data bits are encoded is 66T or 68T and a length of the straight type in the frame data portion of each subsequent data unit is determined depending on the predetermined portion. Neither Lee nor any of the secondary references teach the arrangement of data bits as recited in claim 5 where the length of the straight type and the data portion of each subsequent data unit is determined depending on the predetermined period. The distinction between the first data unit and subsequent data units is not disclosed nor suggested in neither Lee nor any of the secondary references. Further, any conclusions by the Examiner that it would be known to one of ordinary skill in the art are not supported by the

careful reading of the references. Reconsideration of these rejections as they may now apply to amended claims 3 and 5 is requested.

Claims 6, 7, 21 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent Publication No. US 2004/0120247 A1) as applied to claim 1 above and in further view of Murakami et al. (European Patent Publication No. 0997899 A2). Claims 6 and 7 have been cancelled herewith thus rendering the rejection moot with respect to claims 6 and 7.

Claim 21 is directed to a method of recording data on a recording medium having the step of encoding a plurality of data units having a first data unit and subsequent data units where the copy protection information is included in subsequent data units. Claim 21 specifically recites that the first data unit is encoded in straight type and the subsequent data units include first portions encoded in straight type and a second portion having copy protection information encoded in wobble type. The first portion of the subsequent data units includes sync data and a second predetermined portion followed by the second portion encoded in the wobble type. This arrangement of pits to record copy protection information having a first portion with sync data and a predetermined portion followed by the second portion encoded in the wobble type is not disclosed or suggested by Lee either alone or in combination with Murakami.

In the Office Action, the Examiner specifically relies on the combined rejections for claim 1 and 6 as supporting the prior stated rejection of claims 21 and 22. For the reasons set forth above, Lee does not disclose the specific arrangement of recording copy protection information by distinguishing between the first data unit and subsequent data units in the arrangement of straight and wobbled pits when encoding data on a recording medium. Further, there is no recitation in either Lee or Murakami that would support having a predetermined portion followed by the second portion encoded in the wobble type. This particular arrangement of encoding copy protection information on a recording medium further ensures that it is more

difficult to decrypt the information from reading a standard rf signal. The mere use of straight and wobbled pits in a lead-in area as suggested by Lee is insufficient to suggest to one of ordinary skill in the art to use the method as now recited in amended claims 21 and 22.

Claims 9 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent Publication No. US 2004/0120247 A1) as applied to claim 1 above and in further view of Kuroda (U.S. Patent Publication No. US 2003/0067858 A1). Claims 9 and 10 have been cancelled herewith, thus rendering the rejection moot with respect to claims 9 and 10.

Claims 13-16, 18-20 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent Publication No. US 2004/0120247 A1) as applied to claim 1 above and Hayashi (U.S. Patent No. 6,847,599). Claim 20 has been cancelled herewith thus rendering the rejection moot with respect to claim 20. Claims 13-16 are each directed to additional features of the method of reproducing data recited in claim 12. Claim 25 is directed to an apparatus for reproducing data from a recording medium.

As amended, claim 25 includes copy protection information recorded on the second region of a recording medium that distinguishes between the first data unit and subsequent data units. The first data unit having data encoded in straight type and subsequent data units including data encoded in straight type and data encoded in wobble type, respectively. Similar to previously discussed claims, the first data unit includes sync data portion and frame data portion encoded in straight type and each subsequent data unit including sync data portion encoded in straight type and the frame data portion encoded in straight type and wobble type.

With respect to claims 13-16 and 18-19, as amended, each of these claims recite additional features of the method of reproducing data recited in claim 12. As stated previously, the Examiner's reliance on the primary reference to disclose the arrangement of straight and wobbled pits in specific sectors of the lead-in area is unsupported. Hayashi is incapable of

teaching this distinction and the Examiner's reliance on selected portions of the reference to teach particular sections of the rejected dependent claims as misplaced. Whatever similarities may exist between the newly added limitations of these claims and the secondary reference would not have been taught by Hayashi, when viewed alone or combined with Lee. Reconsideration of these rejections is thus requested.

As to claim 25, the aforementioned arguments with respect to Lee support Applicants' position that Lee is incapable of teaching an apparatus as recited in claim 25, as amended. In particular, there is nothing in Lee to suggest the unique combination of recording copy protection information in selected portions of the lead-in area using the combination of wobbled and straight pits as now recited in claim 25.

Claims 23 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent Publication No. US 2004/0120247 A1) as applied to claim 1 above and further in view of Murakami et al. (European Patent Publication No. 0997899 A2) and Kuroda (U.S. Patent Publication No. US 2003/0067858 A1). Claim 24 has been cancelled herewith thus rendering the rejection moot with respect to claim 24.

Claim 23 depends on independent claim 21 which is directed to a method of recording data on a recording medium having the unique attributes discussed above. Further, claim 23 now recites that the predetermined period is 66T or 68T and a length of the straight type in the predetermined portion of each subsequent data unit is determined dependent on the predetermined period. The Examiner specifically relies on the rejections of claims 9 and 21 as supporting the rejection of previously presented claim 23. The combination of references set forth by the Examiner to reject claims 9 and 21 have been discussed previously. Reconsideration of this rejection as it may apply to claim 23, as amended, is respectfully requested.

As explained hereinabove, neither Lee, considered alone or in combination with Murakami or the other secondary references, is sufficient to teach these additional elements of the claim method as recited in claim 12, and further recited in dependent claim 23.

Claims 26-30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent Publication No. US 2004/0120247 A1) as applied in claim 1 above and Hayashi (U.S. Patent No. 6,847,599) and in view of Yokoi (U.S. Patent No. 7,006,419). Claims 27 and 28 have been cancelled herewith thus rendering the rejection moot with respect to claims 27 and 28. Claims 26, 29 and 30 are claims which depend either directly or indirectly, on independent claim 25. Reconsideration of these rejections is respectfully requested in view of the arguments presented here and above with respect to the rejection of claim 25.

As to the Examiner's statement of reasons for indication of allowable subject matter, the recited analysis unfairly characterizes the claims identified as containing allowable subject matter. Claims 4 and 10 have been cancelled and claims 13 and 26 have been amended. Whatever conclusions the Examiner may have reached with regard to previously presented claims 13 and 26 should be re-evaluated in view of the amendments presented in this response. In summary, the Applicants do not concede to the Examiner's characterization of the allowable subject matter as expressly recited in previously presented claims 4, 10, 13, 26 and 27.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-3, 5, 12-19, 21-23, 25-26 and 29-30 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants hereby petition for a three (3) month extension of time for filing a reply to the outstanding Office Action and submit the required \$1050.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By: 

Terry L. Clark, Reg. No. 32,644
P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

TLC/dab